

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Previously presented) A photomultiplier as claimed in Claim 23, wherein the effective area of each of at least some of the dynodes is greater than that of the preceding one.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Withdrawn) A dynode assembly for a photomultiplier or other electron multiplying device comprising at least two dynodes electrically isolated from each other, the dynodes comprising discrete layers of secondary emissive material on shaped surfaces of a common substrate of insulating material.

18. (Withdrawn) A photomultiplier or a dynode assembly as claimed in Claim 16 or Claim 17 wherein the substrate is machined, cast, sintered or otherwise of moulded construction.

19. (Withdrawn) A photomultiplier or a dynode assembly as claimed in Claim 17, wherein the secondary emissive layers are deposited on a conductive underlayer.

20. (Withdrawn) A photomultiplier or a dynode assembly as claimed in Claim 19 wherein the conductive underlayer of a said dynode is extended as a conductive track to form an electrical connection for the dynode.

21. (Withdrawn) A photomultiplier or a dynode assembly as claimed in Claim 17, wherein an electrical connector to a said dynode is embedded in the insulating substrate.

22. (Withdrawn) A photomultiplier or other electron multiplying device comprising a dynode assembly as claimed in Claim 17.

23. (Previously presented) A photomultiplier comprising a plurality of dynodes arranged in cascade so that the second and any subsequent dynodes each receive electrons from the preceding dynode, the dynodes being of curvilinear cross-section and arcuate in extent about a common axis, successive dynodes being disposed so that the cascade extends radially relative to said

axis, wherein a said curvilinear cross-section comprises an arcuate portion and a straight portion extending tangentially therefrom, or a part-elliptical portion or a spiral portion, wherein the dynodes are annular or part annular or segmented, and wherein the curvilinear cross-sections of the dynodes are sections through a set of toroidal surfaces having a common principal axis of rotation each intersected by one of a set of conical surfaces coaxial with the principal axis of rotation of the toroidal surfaces.

24. (Cancelled)

25. (Previously presented) A photomultiplier comprising a plurality of dynodes arranged in cascade so that the second and any subsequent dynodes each receive electrons from the preceding dynode, the dynodes being of curvilinear cross-section and arcuate in extent about a common axis, successive dynodes being disposed so that the cascade extends radially relative to said axis, wherein at least alternate dynodes are spaced from each other successively along said axis, and wherein successive dynodes are alternately disposed on coaxial male and female generally conical surfaces.

26. (Cancelled)

27. (Cancelled)

28. (New) A photomultiplier comprising a plurality of discrete dynodes arranged in cascade so that the second and any subsequent dynodes each receive electrons from the preceding dynode, the dynodes being of curvilinear cross-section and arcuate in extent about a common axis, successive dynodes being

disposed so that the cascade extends radially relative to said axis, wherein the dynodes are arranged in two coaxial substantially planar substantially disc-shaped arrays arranged parallel to and facing each other, and wherein the effective area of each of at least some of the dynodes is less than that of the preceding one.

29. (New) A photomultiplier comprising a plurality of discrete dynodes arranged in cascade so that the second and any subsequent dynodes each receive electrons from the preceding dynode, the dynodes being of curvilinear cross-section and arcuate in extent about a common axis, successive dynodes being disposed so that the cascade extends radially relative to said axis, wherein the dynodes are arranged in two coaxial substantially planar substantially disc-shaped arrays arranged parallel to and facing each other, and wherein at least one of the dynode arrays forms part of the vacuum envelope of the device.

30. (New) A photomultiplier comprising a plurality of discrete dynodes arranged in cascade so that the second and any subsequent dynodes each receive electrons from the preceding dynode, the dynodes being of curvilinear cross-section and arcuate in extent about a common axis, successive dynodes being disposed so that the cascade extends radially relative to said axis, wherein the dynodes are arranged in two coaxial substantially planar substantially disc-shaped arrays arranged parallel to and facing each other, the photomultiplier further comprising an annular part annular or segmented anode for receiving electrons from the last dynode, and wherein the anode is disposed between the dynode arrays.